From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: jim hale <kj5tf@mctc.com> (by way of Jerry Parker <jparker@fix.net>)
Subject: [3427] 39er?
Message-ID: <2.2.32.19960831051321.00bd2f04@fix.net>

Can anyone help Jim...DE WA6OWR

>I'm looking for info on putting the 49er on 30m.

>Can you help me? thanks, de Jim   kj5tf@mctc.com

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: JCoote@aol.com
Subject: [3447] 610V calls list wanted
Message-ID: <960831204248_513707421@emout14.mail.aol.com>

Hello all;

Could someone please E-mail me that list of "taken" 1x2, 2x1, and other calls in the 6 area?

I have my 610V in hand, and want to fill in those 25 choices with calls not already taken.

Web sites aren't an option for me with this present s l o w setup and AOL's new (slower) version 3.

Thanks,
Jay WB6AAM   (.... is W6 or W6A taken...?)

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: "Michael J. Hayes" <74672.2764@CompuServe.COM>
Subject: [3439] Argo 556
Message-ID: <960831202347_74672.2764_BHW38-1@CompuServe.COM>

Help!

I just recently joined this group and hopefully am posting my first message

correctly.
I just bought a used Ten Tec Argo 556 and it seems to work very well on CW (Great!).
I tried hooking up a Yaesu Hand Mic from a FT 890 and also a Heil Boom Mic from a BM 10 for SSB
and I have to advance the mic gain all the way to get the ALC lite to come on for voice peaks and get any power out
per my internal and external watt meter. On Air Reports that I could make varied from OK to tinny.
Any thoughts?

Thanks.

N1FGW

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: n4so@juno.com (CHARLES K BROWN)
Subject: [3436] EDITING IN JUNO
Message-ID: <19960831.102527.4503.2.n4so@juno.com>

CAN SOMEONE THAT USES JUNO TELL ME HOW TO EDIT A
RECEIVED OR A SENT MESSAGE?
AM EDITING QRP FILES TEXT.

n4so@juno.com

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: Robsparks@aol.com
Subject: [3433] FS Tentec rig
Message-ID: <960831112658_191663865@emout14.mail.aol.com>

This little Tentec Century 22 CW rig is great for QRP. RF output is front-panel adjustable 0-20 watts and frequency coverage is 80, 40, 30, 20, 15, and 10 meters with analog dial. It has RIT, adjustable audio bandpass filter, built-in lighted SWR/power meter and circuit breaker overload protection. It also has the optional frequency calibrator card installed. Includes the TenTec 5 amp power supply and a Tentec keyer. The rig is clean and in good shape. Copies of the manuals for the rig, keyer, and ps are included. Price is $350 OBO includes shipping to lower 48.

Bob   AB5ZD QRP-L #185

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: al330@detroit.freenet.org (Bob Williams)
Subject: [3431] fs: 9040
Message-ID: <199608311315.JAA03238@detroit.freenet.org>

I have FS a MFJ 9040 in vgc, $160 (shipped), rig has the optional
keyer, and filter - I have 4 qrp rigs, and need the "green stamps"
for other "stuff"

Thanks 72/72
Bob W9NIP
Mi QRP 104   ARCI 8354 NorCal 1254 ***** WAS - DXCC (155)

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Subject: [3433] FS: MFJ-9020 wq/keyer & CW filter
Message-ID: <Pine.3.89.9608312215.A30643-0100000@w3eax.umd.edu>

Excellent condition, 20m superhet QRP CW xcvr, covers 14.0 - .075 and
contains optional CW filter and keyer unit.

Great shape, with manuals for everything. $160 + sh (UPS). Thanks!x

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
*** 6m 75 grids worked on 8 watts *** HF 138 cfmd * QRP-L #147 ***
** QRP ARCI #9054 ** DXCC/WAS/WAC *** 100% dipole powered HF/6m **
* 301-549-1022 h / 301-982-1015 w *** 145.490- 147.225+ PL 156.7 *

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: Tarte Pierre <ptarte@arcadis.be>
Subject: [3442] Helicoidal vertical antenna (1/2)ON5UP
Message-ID: <9608312304.AA21573@iris.arcadis.be>

HELICOIDAL VERTICAL ANTENNA FOR 40m
=3D=3D=3D

OBJECTIVES:
---
(1) need of a 40 meter band vertical antenna for /P operation (many stays on the Isle of Noirmoutier=3DIOTA EU64).
(2) fast installation directly on the ground (no mast or tree available) and fast dismounting...
(3) easily stored into the trunk of the car and small enough to avoid XYL and children's qrm.
(4) experimentation (and learning) of a new kind of antenna (for me).

DESCRIPTION:see fig.1-2-3

E=3D 630mm copper or brass rod=20
A=3DB=3DC=3DD=3D dia. 32mm 1 meter long PVC pipe; on each of them I have= wound 5
meter enamelled copper wire (dia. 15/10mm=3D1.5mm); spacing between turns= is
about 20mm (=3D2 cm).
M=3Dfemale/female muff, only one side is glued.
J=3Dscrew PVC stopper
F=3Dground
REM.: I used glue specially made for PVC plumbing materials to fix muffes and the enamelled wire (that glue seems to dissolve the enamel along with a thin coat of PVC).

REM.:
---
part E: fixed on screw stopper
soldered on male banana plug but I intend to replace it by a telescopic car antenna.

part M: female/female muff glued on lower pipe.

part F: a larger plate should be better for ability (?)
With or without 4 radials (10m33).
=20
parts A-B-C-D: the wire is fixed by mean of two coats of special PVC glue.

ADJUSTING THE ANTENNA:
---
(1) With a GDO coupled to a two turn coil at the base of antenna (SO239), trim part E for resonance at 7MHZ.
(2) With the ATU tune for better received signal and then
(3) for lowest SWR with TX.

MEASUREMENT OF SWR: with Stockton Pwr Meter, antenna directly on the ground and ---------- 4 radials of 10m33.
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F(MHZ) Pf(W) Pr(W) SWR
=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=
=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D
7 5 0.2 1.08

7.05 5 0.1 1.04

7.1 5 0.05 1.02

7.15 5 0 1

7.2 5 0.1 1.04

7.25 5 0.2 1.08

7.3 5 0.4 1.17
=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=
=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D

Like the SWR is excellent, the ATU serves me only to verefy the transmitted power, the antenna functions just as well without the ATU.

MY ATU:see FIG.4

L=3D26=B5H 44 turns on T106/2 of 50/100 CuL wire: taps at 8,12,15,19,23,26,28,32,35,38 and 41 turns from C1/C2
C1=3DC2=3D350pF var.

FUTURE TESTS:
---
(1) a noise bridge in order to mesure the characteristics of the antenna and improve the antenna (if necessery).
(2) use of the antenna on others bands (see table below)
=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=

		1.50m wound wire + 39 cm rod
28.06	5.168m	1 section D + 17cm rod
10.116	14.336m	2 sections (C+D) + a new pipe with 4 m wound wire + 35cm rod

=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=
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(3) During this winter I am going to go up this antenna with 20 radials on the roof of the house.

With that antenna (directly on the ground)and my MALTA 40 in the afternoon within 2 hours I QSO'ed the following stations:
I2MOV-G0VYT-GM3VPN/QRP-DL8WFU-IK3FHL-F5LMJ-HB9AIG-G8PG/QRP
OZ/DK4HG/QRP-IK3ITS/QRP.
I have just used this antenna some 15 August to August 18 and solely the morning and the afternoon and here the QSO:
GD3FXN/QRP//G3AID/QRP//DK1CR/QRP//F9UJ/QRP//G0WXM/QRP//G0CHV/QRP//F5IYU/M/QRP//OE2WAM//F5OCI//QRP//DL3IAC//G3NSY//IK/DL7CY//G0WAL/MM/QRP//G3TTZ/QRP//G3ADS/QRP//I1HKJ/QRP//FB1PDR//I5VVA//F6EEQ//F6BPS/P//F5NDA/P//DL3MGN/QRP//G0IEI//F2WW//IK3/DL3IAP

REFERENCES:
---
(1) Building helically wound HF antennas-W6TOY/3
(2) Daily QSO on 2 m with walloon G-QRP C members: ON5KZ-ON6GW-ON4KAR-ON5KN
(3) A portable vertical antenna for HF operation-W1FB-P.W. AUGUST 82
(4) Mailing on Internet of W6TOY/3,G3YCC,EA8YU
(5) All About Vertical Antennas-W6SAI/W2LX
(6) Continuously Loaded Helical Whips-ARRL Hdk 1972 (pg 320)
(7) G-QRP Club Antenna Hdk:
   () G3ZOF-3 Band Portable Whip Antenna (pg 92)
   () G8PG-Short, Linear Loaded HF Band Antennas (pg 141)
   () CT4CH-Some Helical Antenna Experiments (pg 11-113)
(8) Adaptation de l'Emetter =E0 la Charge-W1FB/F9IV-Radio REF

For the figures see HELICOIDAL VERTICAL ANTENNA (msge 2)

ON5UP ALWAYS QRP

=20

EMAIL users :

PIERRE TARTE (GSM : 075293198)

ANDRE TARTE (ON5UP/QRP) (G-QRP CLUB 6524)

RUE DU TIGE,37,DREHANCE
B-5500-DINANT-BELGIUM
FAX:082/222832
E-MAIL :ptarte@arcadis.be

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: Tarte Pierre <ptarte@arcadis.be>
Subject: [3443] HELICOIDAL VERTICAL ANTENNA (2/2) ON5UP
Message-ID: <9608312305.AA21576@iris.arcadis.be>

Figure 1:
========

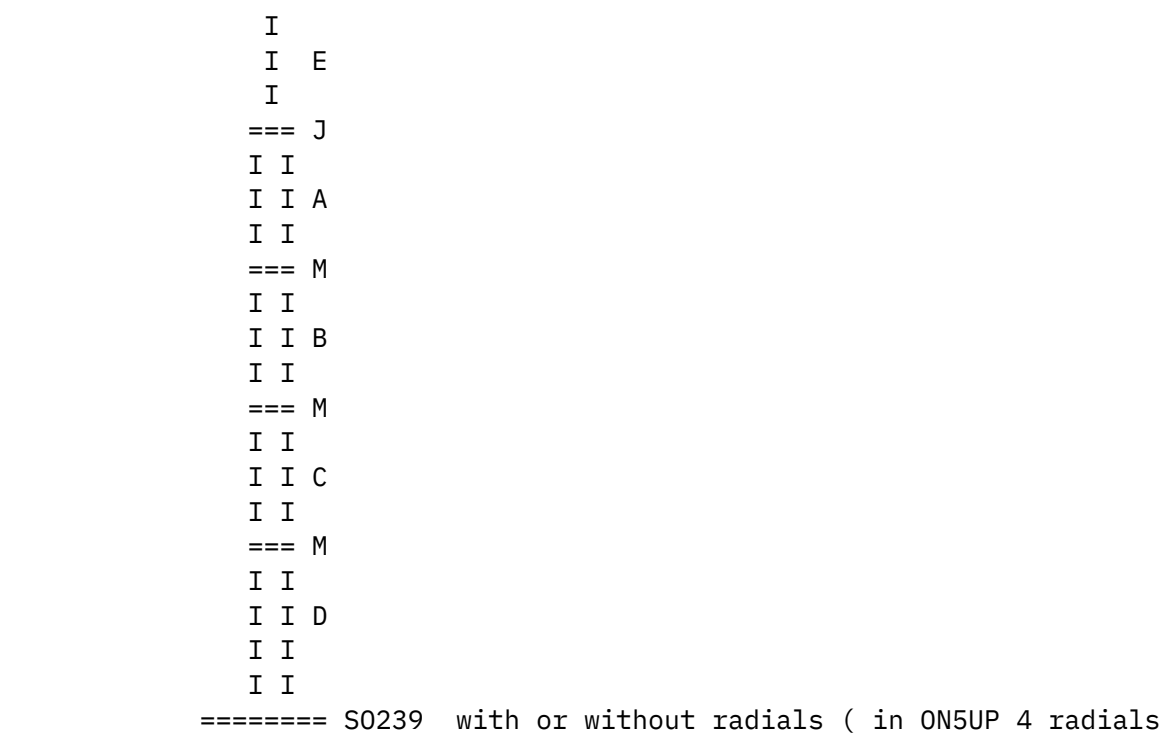


Figure 2:
=========

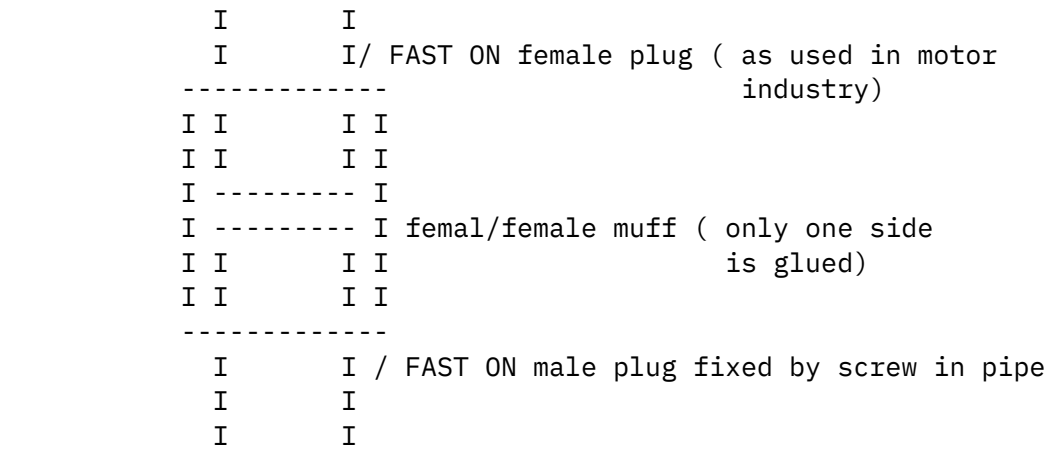


Figure 3:
=========

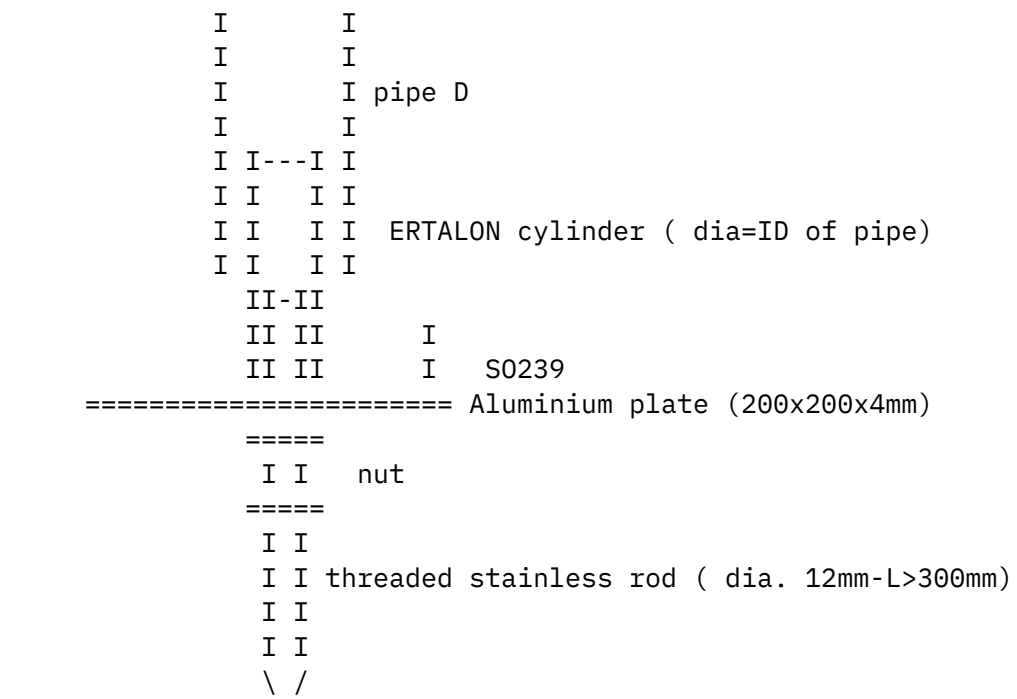
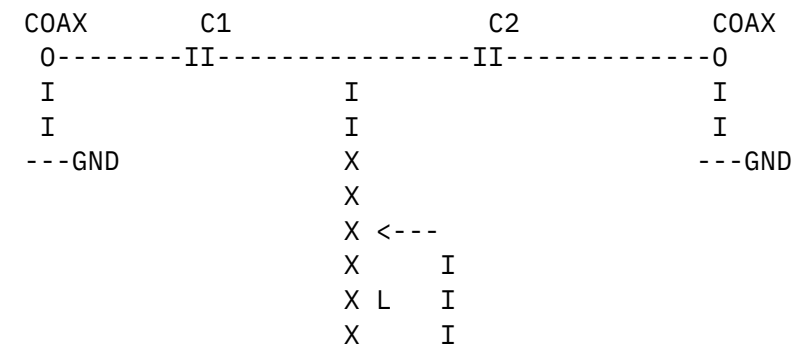
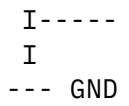


Figure 4:
==========





ON5UP ALWAYS QRP
EMAIL users :

PIERRE TARTE (GSM : 075293198)
ANDRE TARTE (ON5UP/QRP) (G-QRP CLUB 6524)

RUE DU TIGE,37,DREHANCE
B-5500-DINANT-BELGIUM
FAX:082/222832
E-MAIL :ptarte@arcadis.be

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: JCoote@aol.com
Subject: [3446] How to: RACES license??
Message-ID: <960831204250_513707434@emout16.mail.aol.com>

How do I obtain a RACES license for my bona-fide city disaster group, and are there choices of callsigns?

Thanks for reading.

73, Jay
WB6AAM

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: Jdevl@aol.com
Subject: [3437] hw-8 is it still for sale??
Message-ID: <960831130558_398355467@emout17.mail.aol.com>

Seen a notice of someone that had a HW-8 for sale. If you still have it contact me. Jim KK5PY e-mail jdevl@aol.com

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: SCN User <nwqrp@scn.org>
Subject: [3440] Index mods? (fwd)

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: Ron Giuntini <rong@slip.net>
Subject: [3448] Keyers
Message-ID: <E0ux1h8-0007Ml-00@mouse.slip.net>

Fellow hams;
I am still interested in opinions concerning keyers. I am looking for a workhorse that can be used on several rigs, and will not cost too much. What is your favorite and why? Replies to me direct are fine unless you want to share your review with all on this list. I would be interested in any opinions of anyone using a keyer since I am a complete novice at CW at this stage, despite my license class. I am trying to rectify that. I need to string up an antenna and "get going again" .

Ron KB6GK
NorCal #1718
San Francisco

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: "J. Skalski" <jskalski@acsu.buffalo.edu>
Subject: [3438] Sierra/KC2/panel
Message-ID: <Pine.GSO.3.93.960831151713.19177A-100000@destrier.acsu.buffalo.edu>

The new panel came in from Wilderness.

I just mounted it and it looksgreat.
A lot less real estate on the front panel.....I was surprised to find that the ABX and LCD meter had lettering already . C-o-o-L

I was all ready for the panel. I mounted a double row of header pins on the meter. Once the new panel was bolted on and the new controls in place I simply plugged in the "wiring harness".

73,

Jim N2GO
The Buffalo QRP CONNECTION
ARCI #9013 QRP-L #381
jskalski@acsu.Buffalo.EDU

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: kd7s@psnw.com (Bill Jones)

Subject: [3434] Trail Friendly Radios - the concept (long)
Message-ID: <199608311542.IAA20940@sierra.psnw.com>

A short while back Richard Fisher, KI6SN, (on behalf of the Adventure Radio Society) issued a challenge to design a "Trail Friendly Radio" . Having spent a fair amount of time operating portable QRP rigs in the woods myself, I gave the idea a lot of thought. I concluded that "Trail Friendly" may mean different things to different people. Let me explain.

My style of portable operation usually means driving to the mountains and setting up the rig on a picnic table in a campground. Normally I don't hike several miles into the wilderness with a heavy backpack. That means my TFR rig doesn't necessarily have to fit inside an Altoids box. It does have to be rugged, however, to survive the rigors of tent camping for a week. It also has to work well throughout fairly wide temperature excursions.

There are others who aren't happy unless they're at least a dozen miles from any other human being and clinging tenaciously to the side of a volcano. To them, an ideal TFR rig would probably be extremely light weight, small, easy on batteries and totally self-contained.

Another type of Trail Friendly Radio might be more at home sitting on the nightstand in a Holiday Inn. Many business travelers would prefer a good CW QSO rather than watching a vintage movie on HBO at the end of a hectic day. In this case a TFR rig might be powered from an a.c. supply. It would probably need a transmatch in order to deliver power to a short length of wire strung along a curtain rod. It wouldn't have to deal with dust, mositure or wide temperature excursions, however.

Now I'd like to hear from you. What kind of Trail Friendly Radio is best for your type of operation in the field? Should it be the size of a postage stamp without any bells or whistles? Or, would it be better to be totally self-contained including batteries, transmatch and keyer, even if it would be a bit bigger in size? Does it need to be water proof, dust proof and child proof? Does it have to be built like a tank?

I will compile any responses I receive and post the results to the list.

==========
Bill Jones - KD7S <><
Sanger, California
Reply to kd7s@psnw.com
==========

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: kgraham@CSWNET.COM (Kenton E Graham)
Subject: [3432] Wattmeter
Message-ID: <199608311350.IAA03600@troi.csw.net>

HI ALL;
Since I've had several requests regarding the mention I made on the wattmeter that appears in "Joy of QRP", Here's some more info.... 73 de Ken K5ID
PS: a good 100 or 200 microamp meter works best....

>To: kf2ph@bnl.gov
>From: kgraham@CSWNET.COM (Kenton E Graham)
>Subject: Wattmeter
>Cc:
>Bcc:
>X-Attachments:
>
>Hi Nick,
>Here's a "word picture" of the wattmeter...
>tie the anode of a 1n62 or ecg109 diode to the 50 ohms in your dummy load.
>The cathode end is grounded thru a .01 disk cap (100v). The cathode also
>goes to another enclosure with the meter in it. I use a bnc connection to the
>other box. In the other box the bnc goes to an rfc-- 1 mh, 300 microh, or
>8 turns on a ft3743, not critical-- then to resistor of about 200-300k to the
>plus side of the meter. (the resistor can be changed to give full scale at whatever power level you want). Minus side of meter to ground.
>
>That is the complete circuit. If you remove the 50ohm resistor, the
>wattmeter can be calibrated as follows:Use an adjustable power supply and a dvm.
>apply the voltage and meter where the 50 ohms was. correlate lots of voltage points with meter readings. 10 volts is about 5 watts, 22 volts is about 5 watts.
>
>Using the formula P=Vpk*Vpk/2R you will get power. So 10 volts will represent
>1 watt if you have exactly 50 ohms.... etc.
>
>The diode renders your dummy load useless for high power unless you disconnect the diode with a switch or something, because the back voltage is about 60v for the ecg109 and about 100v for the 1n62. Don't forget, or you will blow the diode!!
>
>Of course, this is not an inline wattmeter; but it is very handy in setting up or determining power levels offline..
>
>   good luck and 73, Ken, K5ID
>

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: Vic Simpson <vsimpson@boco.demon.co.uk>
Subject: [3428] Re: ** New Ham Reflector **
Message-ID: <VHR4jFAiR5JyEwKK@boco.demon.co.uk>

In message <01BB96C0.832EF300@ip087.phx.primenet.com>, Brian Short
<ke7gh@primenet.com> writes
>Announcing the newest amateur radio mailing list:
>
>BitBucket is a mailing list (reflector) devoted to
>specialized amateur radio communication techniques.
>
>   -SSTV, ATV, FAX, APT, DSP
>   -Packet, Pactor, GTOR, Clover, RTTY
>   -R/C, Telemetry, Balloons, Rockets, Robotics
>   -homebrew, modifications, interfacing, widgets, etc
>
>To subscribe, send email with body of message SUBSCRIBE bitbucket
>   majordomo@primenet.com
>
>-------------------------------------
>TO: majordomo@primenet.com
>SUBJECT:
>BODY: SUBSCRIBE bitbucket
>-------------------------------------
>
>
Could be a great place to chat to those who operate
digitally on 14.060MHz.
--
Vic Simpson

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: Russ1031@aol.com
Subject: [3435] Re: A QRP Field Day from the Top of a Volcano
Message-ID: <960831115104_398319483@emout08.mail.aol.com>

Hi Phil. Thanks for your kind note about Field Day from the top of the
volcano.

I used a tripod to take the photos. I felt pretty foolish, posing in
front of the darn thing, but it was the only way to get some pics on a
solo adventure.

The mast was made by "New Wave Antennas" (303 761 1458). It's a nice piece of gear, but more hefty than necessary. It weighs 8 1/2 pounds, and my goal is to develop a 26 foot mast that weighs in the 4 to 5 pound range. I'm a believer in masts, because so many of the best HF locations don't have trees with the right height or placement. In my case, the locations are often close to the timber line and don't have trees at all.

The antenna was a simple inverted V, using alligator clip shunts. An inverted V is perfect for my interests, because it's easy to put up, and is more or less omnidirectional. By the way, I just received an antenna kit from Joe Everhart with some elegant and lightweight components. I'm all fired up about putting together a new shunted inverted V from the kit.

I have four sources of inspiration--"HF Antennas for All Locations" by Les Moxon, the TA software developed by Brian Beezely, the CAPMAN propagation software, and the VOA propagation software. I've modeled many mountaintops here in the Northwest and have found a number of backpacking destinations that are both beautiful and killer antenna sites. If you choose the right kind of terrain, you can get launch angles of 10 degrees and lower from an antenna on a 26 foot mast. The propagation programs will show you what an amazing difference is made by those low launch angles, even for destinations within the U.S.

For Field Day I epoxied two battery holders containing 6 AAs each. I didn't really keep track of total hours, but didn't need to change batteries. Right now, my favorite battery pack holds 10 AAs. It's made by Icom for HTs (CM-12G).

You sound like a perfect candidate for the Adventure Radio Society. It's a great group of men and women who like to play with radios in the outdoors. Contact our membership chairman, Richard Fisher, at KI6SN@aol.com. Membership is free.

72, Russ

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: chuckolson@juno.com (Chuck Olson)
Subject: [3425] Re: fs scaf filter kit
Message-ID: <19960830.230730.4799.0.chuckolson@juno.com>

On Fri, 30 Aug 1996 17:02:23 -0400 (EDT) "J. Skalski"
<jskalski@acsu.buffalo.edu> writes:

>This is the SCAF filter described by N4UAU in QST oct. '92
>The same design as the OHR scaf filter.

Does anyone know if OHR is the company that Mr. Ulbing (N4UAU) was talking about in his recent letter to QST (7/96 page 24)??

Best Regards,

Chuck
WB9KZY
Washington Island, WI

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: Phil Wheeler <pcw12@ix.netcom.com>
Subject: [3426] Re: fs scaf filter kit
Message-ID: <3227C742.423D@ix.netcom.com>

Dunno...loaned that issue to a friend. BUT..the OHR SCAF filter is a great kit.

Rig-wise, I prefer the NorCal/Wilderness stuff (have an OHR-400, Sierra and NC-40A). But Dick at OHR (Oak Hills Research) delivers sloid kits at a good price .. and offers excellent support. Why do I prefer the NorCal rigs? -- Smaller and lighter, AND I backpack with them.

The OHR SCAF gives very narrow BW (when you want); I can separate the mark and space on a RTTY signal (170HZ separation); That is good selectivity!

Phil W7UOX

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: Vic Simpson <vsimpson@boco.demon.co.uk>
Subject: [3429] Re: G5RV vs 40M dipole
Message-ID: <9+eeOKAZK$JyEwMp@boco.demon.co.uk>

In message <960830215150_191430346@emout09.mail.aol.com>, JCoote@aol.com writes
>
>Ron and group-
>The G5RV or 40 dipole will work on 40-20 (plus other bands), just don't feed
>it with coax between the antenna and tuner. Remove the coax, give it to
>CB'er with the advice it'll make "Them thar SRW's go down" Next, run 300 ohm

>TV line or 450 ohm ladder line between your tuner and the antenna. The
>longer legs of the G5RV may improve signals. The G5RV dimensions provide a
>lower impedance on ham bands, but other feeder/flattop dimensions will also
>work with a tuner on some or all HF bands.
>
>73, Jay
>WB6AAM
>
Well, it *will* work but as an old timer's tuned doublet rather than a
G5RV. It may be necessary to add or subtract feeder in order to present
the atu with an impedance it can cope with on some bands. I prefer home
brew 600 ohm line; failing that, 300 ohm slotted feeder, which is more
predictable in wet weather.
73 de G0BVZ, Vic
RSGB G-QRP AGCW ARCI(When I remember to renew!) SCAG DIG

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [3430] Re: G5RV vs 40M dipole
Message-ID: <Pine.SOL.3.94.960831072859.16329C-100000@utkux4.utcc.utk.edu>

It=G5RV fed with parallel feeder.
> >
> Well, it *will* work but as an old timer's tuned doublet rather than a
> G5RV. It may be necessary to add or subtract feeder in order to present
> the atu with an impedance it can cope with on some bands.

Let's sort out the idea of "working as." First, the G5RV antenna is 102'
long and will work as a 102' long centerfed wire with respect to the
pattern on each band we use it on. The feed system makes no difference to
the pattern for this antenna.

The G5RV feed system was designed to present a low SWR to the beginning of
the coax on most of the traditional harmonically related ham bands, and
was originally presented before WARC. Getting that low SWR has turned out
to be a bit tricky, depending upon antenna height, parallel feeder used,
velocity factor of the feeder, and Murphy's law, but some builders have
achieved it. Fed with parallel feeder, the concern is to achieve a set of
values of R and jX at the ATU that the ATU can convert to 50 ohms R. At
102' long, the antenna is about a full wavelength long on 30, making it
the more difficult band for just using any old length of feeder, since at
certain points the R and esecially the jX can easily exceed the matching
capabilities of many ATUs. But judicious pruning can yield a set of
values the ATU can handle.

Since the antenna itself will not be affected by the feed system, and

since small changes in the length of the antenna will not significantly affect its performance, here is a quick fix at the planning stage for the 30-meter difficulty: lengthen the antenna by about 10' to set it less close to the 30-meter full-wavelength size. The feedpoint R and jX will come down some, making the discovery of a usable line length somewhat easier.

In general, there is no magic to any of the wire lengths one can use. Longer is better, but height is much better for any multiband horizontal wire. So if you have 116'11 1/4" of space in the clear, why not make your antenna that long and see what your ATU tells you about matching: then adjust line length or antenna length until you can operate efficiently on all the desired bands.

Remember that any wire antenna design that requires you to measure the length with a micrometer is not a good ham design: within a few hours, your wire will stretch beyond the narrow design limits. (Someone will invent some day a superconducting ceramic wire, but that is a long way away.) Doublets, center-fed Zepps, and the thousand other names of ham wires have performed and will perform quite efficiently.

However, given a choice of making my wire twice as long or twice as high, I'll take twice as high every time.

-73-

LB, W4RNL

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: Vic Simpson <vsimpson@boco.demon.co.uk>
Subject: [3441] Re: G5RV vs 40M dipole
Message-ID: <XrxyzRAp+JKyEwxq@boco.demon.co.uk>

In message <Pine.SOL.3.94.960831072859.16329C-100000@utkux4.utcc.utk.edu>, "L. B. Cebik" <cebik@utkux.utcc.utk.edu> writes
>
>However, given a choice of making my wire twice as long or twice as high,
>I'll take twice as high every time.
>
Agreed. Oh yesss....

The tuned doublet works fb as a general purpose -not to say classic- antenna with some combinations of top and feeder being regarded as

optimum in the literature for matching purposes. I guess someone can
supply the magic numbers.

The G5RV, however, was designed to give optimum results on 20m in terms
of matching and modest gain. There are no guarantees of similar optimal
results wrt matching or gain with the tuned doublet.

The design criteria for the td is along the lines of "get as much wire
in the air as high as you can and feed with open wire feeders". That
certainly agrees with your advice.

Has anyone had any luck constructing a ZS6BKW antenna? The main
difficulty seems to be constructing an open wire feed of 400 ohms. This
seems easy to do with single conductor uninsulated wire; I prefer
insulated multistranded wire for greater flexibility. There lies my
problem. Anyone developed a quick n' easy method?
73 de G0BVZ, Vic
RSGB G-QRP AGCW ARCI(When I remember to renew!) SCAG DIG

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [3445] Re: G5RV vs 40M dipole
Message-ID: <Pine.SOL.3.94.960831193408.13113A-100000@utkux4.utcc.utk.edu>

On Sat, 31 Aug 1996, Vic Simpson wrote:
> The tuned doublet works fb as a general purpose -not to say classic-
> antenna with some combinations of top and feeder being regarded as
> optimum in the literature for matching purposes. I guess someone can
> supply the magic numbers.
>
> The G5RV, however, was designed to give optimum results on 20m in terms
> of matching and modest gain. There are no guarantees of similar optimal
> results wrt matching or gain with the tuned doublet.

Matching, yes, in accord with my previous note. Gain, no, or no better
than any other 102' centerfed piece of wire at the same height. The 102'
piece of wire at a given height has a gain in dBi above that of a
half-wave 20' dipole simply because it is longer, but not as high as a
full wave centerfed wire ar a 1 1/14 wavelength centerfed piece of wire
(the Extendeed Double Zepp). The gain over a half wavelength dipole is
not exceptionally high--less than a dB.

The 102' foot wire presents a certain impedance, which the 33' 450-ohm or
29' 300-ohm parallel transmission line transforms along its length to
something acceptable to coax (25 to 100 ohms with negligible reactance for
a 2:1 SWR). One can calculate the exact length needed rfor any parallel

transmission line via programs on the collection called HAMCALC (VE3ERP's collection of BASIC programs) once one has modeled the wire and knows the expected antenna feedpoint impedance. Or one can model, using NEC, the entire wire-parallel feedline length until the XCVR end of the parallel feedline shows a feedpoint impedance in the coax range, since NEC handles transmission lines. The system is a special application of series feed sections, which have been described in ARRL Antenna Books for quite a long time, and those calculations will also work. Regier's work on the mathematical derivation of series-section transmission-line Impedance matching appeared in QST in 78 and refers to two earlier articles by him for details on the development of his calculations. Series quarter-wave sections are another special case of his general equations.

The old handbook A+B+B+A lengths were experientially derived parallel feedline plus centerfed wire antenna lengths known to be able to be matched using the typical link coupled ATUs of the 30s. They had no magic as antennas, but simply presented newer operators with systems that were very likely to work. Their modeled gains are exactly those to be expected with wires of the specified length at the specified height, whatever the feedline length or type (ignoring for the moment, feeder loss with coax and the impedance presented at the xcvr end).

Among the older lengths was 100', a nice round number, only 2' away from the G5RV. Indeed, perhaps one should refer to the 100-102' doublet with the G5RV feed system, rather than thinking of the antenna wire as itself being special.

-73-

LB, W4RNL

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: Jdevl@aol.com
Subject: [3444] Re: HW-8
Message-ID: <960831193458_398551811@emout13.mail.aol.com>

If it still for sale contact jdevl@aol.com. lost your note in the shuffle I guess.

From owner-qrp-l@Lehigh.EDU Sat Aug 31 23:11:56 1996
From: Jim Hossack <w7ls@brigadoon.com>
Subject: Index mods?

Hi, all. I am interested in finding out about any mods for the Index qrp rig. Particularly how to lock the dial and get to the other sideband. I assume that the dial lock involves a spst switch to disable the rotary dial encoder counter and the opposite sideband could be accessed with a second crystal for the bfo. Any specifics would be appreciated.

Oh, the dial lock would be handy for mobile operation, which is one of my gigs. 73/72 de Jim, W7LS

Duvall, WA